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Mineral Industry Surveys

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ANTIMONY IN THE SECOND QUARTER 2004

Consumption of primary antimony in the first half of 2004 increased by 5% over that of the comparable period of 2003, according to data compiled by the U.S. Geological Survey. Secondary antimony production declined by 3% in the first half year compared with that of the comparable period of 2003.

Antimony prices generally softened during the second quarter. The New York dealer price of antimony metal published by Platts Metals Week started the quarter at a range of $1.38 to $1.45 per pound, and drifted down to $1.20 to $1.24 per pound by late June.

Imports of antimony in the first 5 months of 2004 increased by 7% over those in the first 5 months of 2003.

Antimony trioxide continued to be the dominant form of imported antimony. In the January-May period, China was the largest source of trioxide imports, followed by Mexico.

Traders and users recently noted an increasing amount of high-bismuth content antimony, which many users find unusable, appearing from China. Industry sources believed that this situation may have two causes: The Chinese recently started mining "complex ores" which may contain higher percentages of bismuth, and the Chinese have been importing antimony ores and concentrates from new sources. Concern over the high-bismuth antimony prompted Metal Bulletin to adjust its specification to reflect a benchmark quality. As of October 1, 2004, the Metal Bulletin price quotation will be for antimony having a maximum bismuth content of 100 parts per million (Metal Bulletin, 2004a).

Albemarle Corp. (Richmond, VA), a flame retardant producer, announced that it had formed a strategic alliance with China Antimony Chemicals, a subsidiary of China Minmetals Nonferrous Metals, to market antimony trioxide in the United States. Albemarle planned to sell antimony trioxide produced at the Minmetals plant in Nanning, Guangxi Autonomous Region (Ryan's Notes, 2004).

In southwest China, the local government of the Guangxi Autonomous Region announced that it had granted China's state-owned Minmetals Group the right to redevelop its Nandan antimony mines, which are the largest in China. The Guangxi Region local government, however, would retain some interest in the mines. Minmetals was finalizing plans to undertake a geologic feasibility study at the mine area, which may take 1 year to complete. Reportedly, more than 300 shafts were operated illegally in the area in the past. Before mining can resume, the company must first find a way to drain the mines, which have been flooded since 2001. The Nandan mines were the largest producer of antimony in China before they were shut, with production of about 50,000 metric tons per year of contained antimony. The mines produced a relatively high-grade concentrate compared with that of other Chinese producers. Several years would still be needed before the mines could be restarted (Metal Bulletin, 2004b).

References Cited

Metal Bulletin, 2004a, Bismuth concern sparks antimony quote rethink: Metal Bulletin, no. 8850, July 12, p. 15.
Metal Bulletin, 2004b, Nandan antimony mines: Metal Bulletin, no. 8846, June 14, p. 14.
Ryan's Notes, 2004, Antimony slumbers: Ryan's Notes, v. 10, no. 26, June 28, p. 6.

TABLE 1
SALIENT ANTIMONY STATISTICS[1]

(Metric tons, antimony content, unless otherwise specified)

		2004	
	2003[p]	First quarter	Second quarter
Production:			
Primary smelter[2]	W	W	W
Secondary	5,600 [r]	1,000	1,050
Imports for consumption:	26,700	6,880 [r]	5,320 [3]
Ore and concentrate	412	60 [r]	579 [3]
Metal	4,670	1,770 [r]	1,240 [3]
Oxide[4]	21,600	5,050 [r]	3,510 [3]
Exports:	3,680 [r]	1,490 [r]	731 [3]
Metal, alloys, and scrap (gross weight)	771	167 [r]	44 [3]
Oxide[4]	2,910 [r]	1,320 [r]	687 [3]
Consumption of primary antimony	9,230 [r]	2,960	3,070
Price: Average cents per pound[5]	107.52	127.67	126.32
Stocks, end of period[6]	W	3,530 [r]	3,250

[p]Preliminary. [r]Revised. W Withheld to avoid disclosing company proprietary data.
[1]Data are rounded to no more than three significant digits, except prices.
[2]Nearly all primary smelter output is antimony trioxide.
[3]Data for April and May only; June data were not available at time of publication.
[4]Antimony content is calculated by the U.S. Geological Survey.
[5]New York dealer price for 99.5% to 99.6% metal, c.i.f. U.S. ports.
[6]Producer and consumer stocks.

TABLE 2
INDUSTRY STOCKS OF PRIMARY ANTIMONY
IN THE UNITED STATES[1]

(Metric tons, antimony content)

	2004[2]	
Class of material	First quarter[r]	Second quarter
Metal	546	W
Oxide	2,650	1,860
Other[3]	230	1,310
Total	3,420	3,160

[r]Revised. W Withheld to avoid disclosing company proprietary data.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Estimated 100% coverage based on reports from respondents who held 87% of the total stocks of antimony at the end of 2003.
[3]Includes ore and concentrate, sulfide, and residues.

TABLE 3
INDUSTRIAL CONSUMPTION OF PRIMARY ANTIMONY[1, 2]

(Metric tons, antimony content)

Class of material consumed	2003[r, p]	2004[2]	
		First quarter	Second quarter
Oxide	7,620	2,440	2,560
Other[3]	1,610	523	509
Total	9,230	2,960	3,070

[p]Preliminary. [r]Revised.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Estimated 100% coverage based on reports from respondents who consumed 29% of the total antimony in 2003.
[3]Includes ores and concentrates, metal, sulfide, and residues.

TABLE 4
REPORTED CONSUMPTION OF PRIMARY ANTIMONY, BY CLASS OF MATERIAL PRODUCED[1]

(Metric tons, antimony content)

Product	2003[r, p]	2004[2]	
		First quarter	Second quarter
Metal[3]	2,410	725	780
Nonmetal[4]	2,100	1,030	1,150
Flame-retardants:			
Plastics	3,680	402	445
Other[5]	1,040	534	692
Total	4,720	935	1,140
Total reported	9,230	2,690	3,070

[p]Preliminary. [r]Revised.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Estimated 100% coverage based on reports from respondents who consumed 29% of the total antimony in 2003.
[3]Includes ammunition, antimonial lead, bearing metals and bearings, cable coverings, castings, sheet and pipe, and solder.
[4]Includes ammunition primers, pigments, ceramics and glass, and plastics.
[5]Includes adhesives, pigments, rubber, and textiles.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ANTIMONY, BY CLASS AND COUNTRY[1]

(Metric tons, antimony content)

Class and country	2003[p]	2004				
		First quarter[2]	March	April	May	January-May[2]
Ore and concentrate:						
China	350	60	40	40	439	539
Other	63	--	--	--	100	100
Total	412	60	40	40	539	638
Metal:						
China	3,350	1,510	819	341	62	1,920
Mexico	655	41	21	121	18	180
Peru	394	94	40	20	23	136
Other	269	118	69	424	226	769
Total	4,670	1,770	949	906	329	3,000
Oxide:[3]						
Belgium	2,150	431	184	225	172	828
China	7,940	2,330	560	783	714	3,830
Hong Kong	1,430	17	--	83	66	166
Mexico	7,240	2,070	732	743	607	3,420
South Africa	2,630	133	--	--	65	198
Other	192	68	41	17	33	118
Total	21,600	5,050	1,520	1,850	1,660	8,560
Grand total	26,700	6,880	2,510	2,800	2,530	12,200
Other antimony compounds (gross weight)	59	7	2	--	32	38

[p]Preliminary. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes revisions to prior months data.

[3]Antimony content is calculated by the U.S. Geological Survey.

Source: U.S. Census Bureau.